

Attorney Docket: S98-157/US

Declaration for Patent Application and Power of Attorney

As a below named inventor, I hereby declare that my residence, post office address, and citizenship are as stated below next to my name, and that I believe I am the original, first and sole inventor (if only one is listed) or an original, first and joint inventor (if plural names are listed) of the subject matter which is claimed and for which a patent is sought on the invention described in the application No. 09/993,338 entitled **Direct DNA Sequencing with a Transcription Protein and a Nanometer Scale Electrometer**.

First or Sole Inventor:	Full name:	SCOTT R. MANALIS	Citizenship:	US
	Residence:	390 Merida Drive, Santa Barbara, CA 93111		
	Postal Address:	same as above		
Second Joint Inventor (if any):	Full name:	STEPHEN C. MINNE	Citizenship:	US
	Residence:	2223 Denmark, Danville, IL 61832		
	Postal Address:	Same as above		
Third Joint Inventor (if any):	Full name:	CALVIN F. QUATE	Citizenship:	US
	Residence:	340 Prinelod Pd., Menlo Park, CA		
	Postal Address:	Same as above		

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). I claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN APPLICATION(S)

Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C. §119
NONE			<input type="checkbox"/> Yes <input type="checkbox"/> No

I claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

PRIOR U. S. APPLICATION(S)

Application No.	Filing Date	Status
60/253,315	11/17/2000	<input checked="" type="checkbox"/> [X] Provisional <input type="checkbox"/> [] Patented <input type="checkbox"/> [] Pending <input type="checkbox"/> [] Regular

I hereby appoint Thomas J. McFarlane, Reg. No. 39,299, Marek Albosza, Reg. No. 39,894, Katharina Wang Schuster, Reg. No. P-50,000, Ron Jacobs, Reg. No. P-50,142 as my agents with full power of substitution to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith. Direct all correspondence to:

Marek Albosza
45 Cabot Ave., Suite 110
Santa Clara, CA 95051
tel: (408) 260-7300
fax: (408) 260-7301

The attorney docket number for this case is: **S98-157/US**.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Title 18, §1001 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

INVENTOR SIGNATURE(S)

SCOTT R. MANALIS

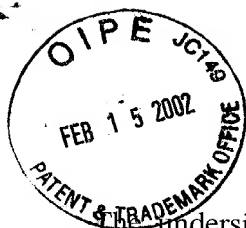
Date

STEPHEN C. MINNE

Date

CALVIN F. QUATE

Date



Attorney Docket No: S98-157/US

POWER OF ATTORNEY BY ASSIGNEE

The undersigned assignee of the entire interest in the application No. 09/993,338 for Letters Patent for the invention entitled:

Direct DNA Sequencing with a Transcription Protein and a Nanometer Scale Electrometer

by virtue of Assignment recorded concurrently herewith hereby appoints Thomas J. McFarlane, Reg. No. 39,299, Marek Alboszta, Reg. No. 39,894, Katharina Wang Schuster, Reg. No. P-50,000, Ron Jacobs, Reg. No. P-50,142 as its agents to prosecute the attached application and to transact all business in the Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventor(s) and their attorney(s) in accordance with the provisions of Rule 32 of the Patent Office Rules of Practice.

Please direct all communication relative to said application to the following correspondence address:

Marek Alboszta
Lumen
45 Cabot Ave., Suite 110
Santa Clara, CA 95051
tel: (408) 260-7300
fax: (408) 260-7301

I am duly authorized to sign this instrument on behalf of assignee corporation. I hereby declare that, to the best of my knowledge and belief, title is in the assignee herein, and I affirm review of the Assignment document concurrently submitted and believe that the attached application has been assigned to assignee herein and that assignee therefore has the right to make this Power of Attorney and Exclusion of Inventor(s).

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

ASSIGNEE: THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

Stanford University
Office of Technology Licensing
900 Welch Road, Suite 350
Palo Alto, CA 94304

Official Authorized to Act on Behalf of Assignee:

Signature: Katharine Ku

Name: Katharine Ku

Title: Director, Office of Technology Licensing

Dec. 14, 2001

Date



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Declaration for Patent Application and Power of Attorney

As a below named inventor, I hereby declare that my residence, post office address, and citizenship are as stated below next to my name, and that I believe I am the original, first and sole inventor (if only one is listed) or an original, first and joint inventor (if plural names are listed) of the subject matter which is claimed and for which a patent is sought on the invention described in the application No. 09/993,338 entitled **Direct DNA Sequencing with a Transcription Protein and a Nanometer Scale Electrometer**.

First or Sole Inventor:	Full name:	SCOTT R. MANALIS	Citizenship:	US
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PRIOR U. S. APPLICATION(S)

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INVENTOR SIGNATURE(S)

Scott R. Manalis
SCOTT R. MANALIS

12/17/01
Date

STEPHEN C. MINNE

Date

CALVIN F. QUATE

Date



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Attorney Docket No: S98-157/US

ASSIGNMENT

THIS ASSIGNMENT, by

SCOTT R. MANALIS, STEPHEN C. MINNE AND CALVIN F. QUATE

(hereinafter referred to as the Assignors), residing at **Santa Barbara, California; Danville, Illinois and Menlo Park, California** respectively, witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in

Direct DNA Sequencing with a Transcription Protein and a Nanometer Scale Electrometer

for which application No. 09/993,338 for Letters Patent has been executed on 12/18/01,

WHEREAS,

The Board of Trustees of the Leland Stanford Junior University

(hereinafter referred to as the Assignee), a body having corporate powers under the laws of the state of **CALIFORNIA, STANFORD, CALIFORNIA 94305**, is desirous of obtaining the entire right, title and interest in and to said inventions and said application for Letters Patent, and in and to any Letters Patent, United States or foreign, to be obtained therefor and thereon;

WHEREAS, said Assignors and said Assignee have executed an agreement entitled "Agreement Concerning Rights in Invention."

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and sufficient considerations, the receipt of which is hereby acknowledged:

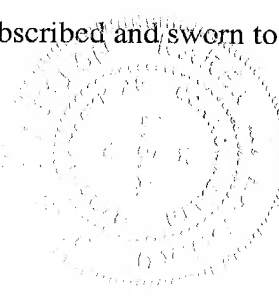
1. The Assignors have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said Assignee, the entire right, title and interest in, to and under said inventions; said application for Letters Patent; any Letters Patent which may be granted for said inventions in the United States of America and any foreign country; any division of said application, continuation of said application, and any continuation-in-part of said application which is subject to said agreement concerning rights in invention; any reissue or extension of said Letters Patent; and all rights under the International Convention for the Protection of Industrial Property; said right, title and interest to be held and enjoyed by said Assignee for its own use and behoove to the full end of the term for which Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made.
2. Said Assignors hereby jointly and severally warrant and represent that, at the time of execution and delivery of these presents, said Assignors are the joint and lawful owners of the entire right, title and interest in and to said inventions and said application for Letters Patent, and that the same have not entered into any assignment, contract or understanding in conflict herewith.
3. Said Assignors hereby jointly and severally covenant and agrees to assist and cooperate with said Assignee, whereby said Assignee may enjoy to the fullest extent said right, title and interest herein conveyed, provided, however, that the entire expense which may be incurred by said Assignors in lending such assistance and cooperation be paid by Assignee. Such cooperation shall include: (a) prompt execution of all papers (prepared at the expense of Assignee) which are deemed necessary or desirable by Assignee to perfect said right, title and interest herein conveyed, (b) prompt execution of all petitions, oaths, specifications, declarations and other papers (prepared at the expense of Assignee) which are deemed necessary or desirable by Assignee for filing or prosecuting in the United States or any foreign country said application, any application which is a division of said application, continuation of said application, or any continuation-in-part of said application which is subject to said agreement concerning rights in invention, any reissue application for any Letters Patent granted on said application, or for any interference proceeding involving said application or Letters Patent granted thereon; and (c) prompt assistance and cooperation in the prosecution of all legal proceedings involving said inventions, said application, or Letters Patent granted thereon, including oppositions, cancellation proceedings, priority contests, public use proceedings and court actions.

4. The terms, covenants and conditions of this Assignment shall inure to the benefit of said Assignee, its successors, assigns and/or other legal representatives, and shall be binding upon said Assignors, their heirs, legal representatives and assigns.

5. The terms, covenants and conditions of this Assignment are subject to the payment of royalty by Assignee to Assignors in accordance with the provisions of said Agreement Concerning Rights in Invention.

6. Said Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States to said Assignee as the assignee of said inventions.

IN WITNESS WHEREOF said Assignors have executed and delivered this instrument on the respective dates noted below.

Date: <u>12/17/01</u>	<u>Scott R. Manalis</u> SCOTT R. MANALIS
State: <u>MASSACHUSETTS</u> County: <u>MIDDLESEX</u>	
Subscribed and sworn to before me on this <u>17</u> day of <u>DECEMBER</u> , 2001	
	Exp. 1/17/2002
<u>Karen M. Navarro</u> Notary Public	

Date: _____	_____
STEPHEN C. MINNE	
State: _____ County: _____	
Subscribed and sworn to before me on this _____ day of _____, 20____	
_____ Notary Public	

Date: _____	_____
CALVIN F. QUATE	
State: _____ County: _____	
Subscribed and sworn to before me on this _____ day of _____, 20____	

Notary Public